

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE TRAFFIC SIGNAL AT THE INTERSECTION OF MD 188 (WILSON LANE) AND MD 191 (BRADLEY BOULEVARD) INCLUDING INTERSECTION LIGHTING ON MD 188 IN MONTGOMERY COUNTY. MD 188 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA (4) FOUR-PHASE FULL-TRAFFIC-ACTUATED MODE WITH EASTBOUND AND WESTBOUND MD 188 (WILSON LANE) APPROACHES OPERATING CONCURRENTLY. THE EASTBOUND AND WESTBOUND MD 191 (BRADLEY BOULEVARD) APPROACHES OPERATE CONCURRENTLY.

AN ALTERNATE PEDESTRIAN PHASE WILL BE PROVIDED ACROSS THE SOUTH LEG OF THE INTERSECTION.

THIS SIGNAL WILL BE INTERCONNECTED TO THE MONTGOMERY COUNTY SIGNAL SYSTEM. THE SURVEILLANCE CAMERA EQUIPMENT IN THE SOUTHWEST QUADRANT OF THE INTERSECTION SHALL REMAIN IN SERVICE DURING CONSTRUCTION AND WILL BE RELOCATED BY MONTGOMERY COUNTY FORCES.

CONTROLLER REQUIREMENTS

A FULLY-TRAFFIC-ACTUATED EIGHT PHASE TRAFFIC SIGNAL CONTROLLER IN A BASE-MOUNTED (SIZE-6) CABINET (SHA SPECIFICATIONS) WITH ECONOLITE ASC 2 2100 CONTROLLER, SSM 12 E CONFLICT MONITOR, POWER SUPPLY FOR RACK MOUNTED DETECTION, LAU PANEL AND RELAY PACKAGE WIRED TO MONTGOMERY COUNTY SPECIFICATIONS.

THE CONTRACTOR SHALL CONTACT MONGOMERY COUNTY 3 TO 4 WEEKS PRIOR TO INSTALLATION TO ARRANGE PICK UP OF THE CONTROLLER.

PROJECT CONTACTS

CONTACTS FOR DISTRICT 3:

MR. LEE STARKLOFF  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (301) 513-7318

MR. AUGIE REBISH  
DISTRICT UTILITIES ENGINEER  
PHONE: (301) 513-7350

MR. RALEIGH MEDLEY  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (301) 513-7304

THE POWER COMPANY REPRESENTATIVE:

MS. ELIZA HEMINGWAY  
POTOMAC ELECTRIC POWER COMPANY  
PHONE: (301) 670-8740

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY:

MR. RICHARD DAFF SR.  
CHIEF, TRAFFIC OPERATIONS  
410-787-7630

MR. ROBERT SNYDER  
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS  
410-787-7630

MR. ED RODENHIZER  
TEAM LEADER SIGNAL OPERATIONS  
410-787-7650

MR. EUGENE BAILEY  
TEAM LEADER SIGN OPERATIONS  
410-787-7676

MR. DAVE SCHWARTZ  
SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE)  
410-787-7668

CONTACTS FOR MONTGOMERY COUNTY:

MR. MIKE KINNEY  
MONTGOMERY COUNTY DPW-ATMS  
SURVEILLANCE CAMERAS  
PHONE: (240) 777-8760

MR. BOB GONZALES  
MONTGOMERY COUNTY DPW-ATMS  
PHONE: (240) 777-8761

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

SPEC NO.	CATEGORY CODE NO.	QUANTITY	DESCRIPTION
803	973001	230 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF:  - 8 EACH D-3(1) (96"x16") MAST ARM MOUNT - 2 EACH R10-4(1) (10"x9") POLE MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY "EAST, MD 188, LEFT ARROW" (48 IN. x 75 IN.) - POLE MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY "WEST, MD 188, RIGHT ARROW" (30 IN. x 51 IN.) - POLE MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY "WEST, MD 188, LEFT ARROW" (48 IN. x 75 IN.) - POLE MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY "EAST, MD 188, RIGHT ARROW" (30 IN. x 51 IN.) - POLE MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY "WEST, MD 188, LEFT ARROW" (48 IN. x 75 IN.) - POLE MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY "WEST, MD 191, LEFT ARROW" (48 IN. x 75 IN.) - POLE MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY "WEST, MD 191, RIGHT ARROW" (30 IN. x 51 IN.) - POLE MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY "WEST, MD 191, LEFT ARROW" (48 IN. x 75 IN.) - POLE MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY "EAST, MD 191, RIGHT ARROW" (30 IN. x 51 IN.) - POLE MOUNT - 1 EACH R10-1 MOD PEDESTRIAN EDUCATION SIGN 12" X 9" - POLE MOUNT
816	900000	1 Ea.	EIGHT PHASE (FULLY ACTUATED) CONTROLLER AND CABINET-BASE MOUNT W/ LAU
---	900000	1 Ea.	VIDEO INTERFACE EQUIPMENT

EQUIPMENT LIST "B"

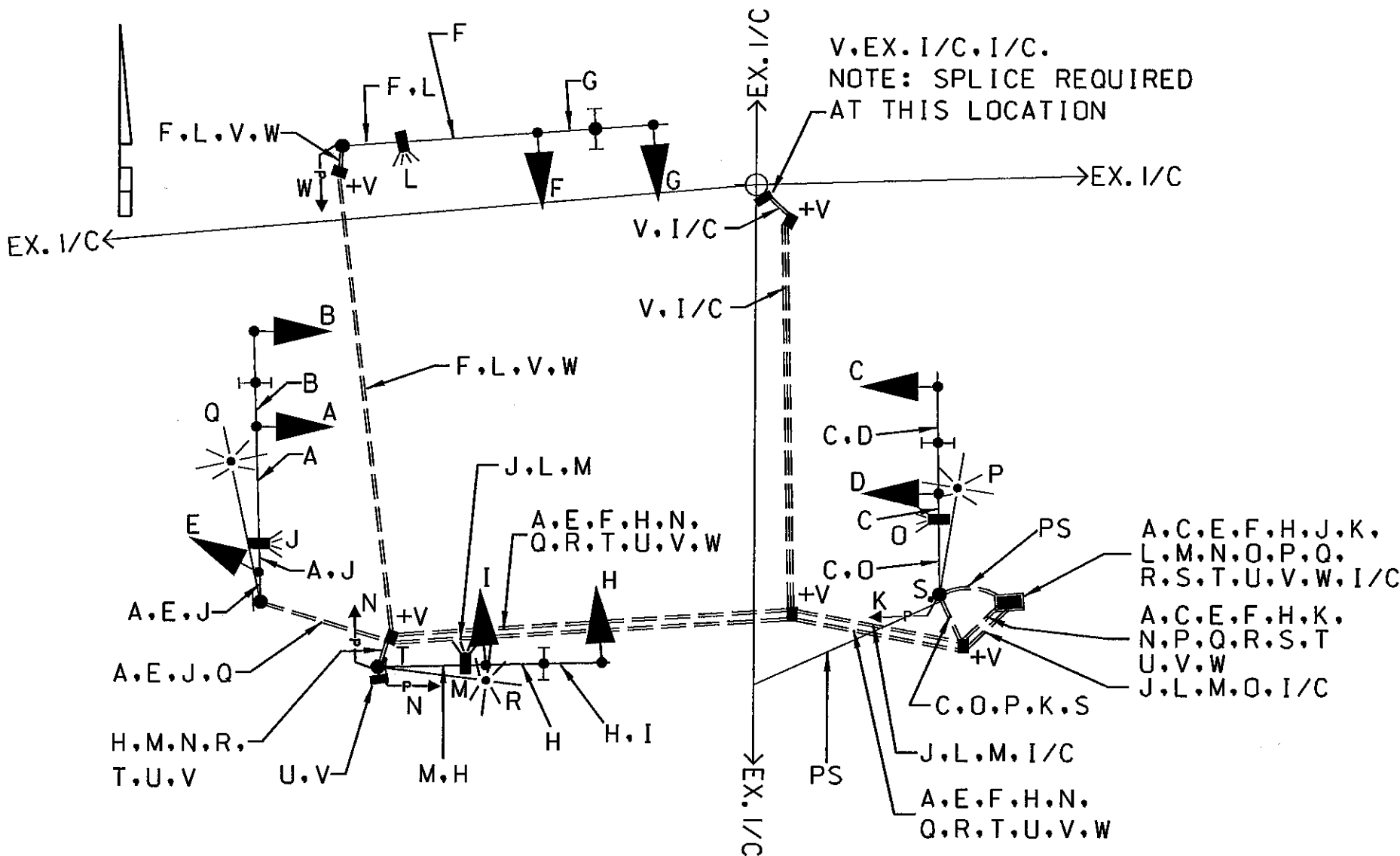
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

SPEC. SECTION	CATEGORY CODE NO.	QUANTITY	DESCRIPTION
104	120500	L.S.	MAINTENANCE OF TRAFFIC
205	203030	6 C.Y.	TEST PIT EXCAVATION
549	585462	112 L.F.	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS - ANY WIDTH
556	585620	190 L.F.	12 IN. HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
556	585624	65 L.F.	24 IN. HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
801	801004	14 C.Y.	CONCRETE FOR SIGNAL FOUNDATION
803	807400	1 EACH	ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 VOLTS 60 AMPS
804	837001	6 EACH	GROUND ROD - 3/4 IN. DIAMETER X 10 FT. LENGTH
805	805050	1 EACH	WEATHER HEAD, 3"
805	805155	250 L.F.	4 IN. SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
805	800000	10 L.F.	2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805	800000	40 L.F.	3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805	800000	75 L.F.	4 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
806	831010	3 EACH	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE
810	861105	265 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)
810	802501	230 L.F.	STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
810	822002	190 L.F.	12-PAIR COMMUNICATION CABLE - JELLYFILLED
810	861104	175 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
810	861106	330 L.F.	ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 AWG)
810	861107	310 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
810	861108	920 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
810	861117	140 L.F.	ELECTRICAL CABLE - 3 WIRE (NO. 4 AWG)
811	811001	5 EACH	ELECTRICAL HANDHOLE
812	801106	70 L.F.	WOOD SIGN SUPPORTS 4 INCH x 6 INCH
813	801605	194 S.F.	INSTALL OVERHEAD SIGN
813	801607	36 S.F.	INSTALL SHEET ALUMINUM SIGNS
814	860272	27 EACH	12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
814	860278	6 EACH	12 IN. PEDESTRIAN SIGNAL HEAD SECTION - POLE MOUNT
814	860282	2 EACH	12 IN. PEDESTRIAN SIGNAL HEAD SECTION - PEDESTAL POLE MOUNT
---	816001	4 EACH	VIDEO DETECTION CAMERA
816	816005	4 EACH	250' PREMANUFACTURED CAMERA TO CABINET CABLE
816	800000	1 EACH	INSTALL EIGHT PHASE, FULLY-ACTUATED TRAFFIC SIGNAL CONTROLLER IN A NEMA SIZE "6" BASE MOUNTED SYSTEM READY CABINET W/LAU
---	800000	1 EACH	FURNISH AND INSTALL SPLICE CABINET
818	818036	1 EACH	FURNISH AND INSTALL 21' STEEL POLE WITH SINGLE 50' MAST ARM (CUT TO 45')
818	800000	3 EACH	FURNISH AND INSTALL 27' STEEL POLE WITH SINGLE 38' MAST ARM (CUT TWO ARMS TO 32')
818	866104	2 EACH	15 FT. LIGHTING ARM ON SIGNAL STRUCTURE
818	866104	1 EACH	20 FT. LIGHTING ARM ON SIGNAL STRUCTURE
SP	860292	3 EACH	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
805	865001	2 EACH	PUSHBUTTON AND SIGN
---	800000	L.S.	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
---	800000	4 EACH	REMOVE AND DISPOSE OF EXISTING FOUNDATION 12 IN. BELOW GRADE

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13
	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(H) (H) (H)	(H) (H) (H)	(H) (H) (H)	(H) (H) (H)
PHASE 2+6	R	R	R	R	R	G	G	G	G	DW	DW	WALK	WALK
2+6 CHANGE	R	R	R	R	R	Y	Y	Y	Y	DW	DW	FL/DW	FL/DW
PHASE 4+8	G	G	G	G	G	R	R	R	R	DW	DW	DW	DW
4+8 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW
PHASE 8 ALT	G	G	G	G	G	R	R	R	R	WALK	WALK	DW	DW
PED CLEAR	G	G	G	G	G	R	R	R	R	FL/DW	FL/DW	DW	DW
8 ALT CHANGE	Y	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW
FLASHING OPERATION	FL/R	FL/R	FL/R	FL/R	FL/R	FL/Y	FL/Y	FL/Y	FL/Y	DARK	DARK	DARK	DARK

WIRING DIAGRAM



WIRING KEY

T }	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
P,Q,R }	2-CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG)
K,W }	3-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
B,D,G,I,N }	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
A,C,E,F,H }	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
J,L,M,O }	250' PREMANUFACTURED CAMERA TO CONTROL CABINET CABLE
U }	3-WIRE ELECTRICAL CABLE (NO. 4 AWG)
V }	STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
EX.I/C -	EXISTING INTERCONNECT CABLE (OVERHEAD)
I/C -	12-PAIR JELLYFILLED INTERCONNECT CABLE (NO. 19 AWG)
PS -	PROPOSED OVERHEAD ELECTRICAL SERVICE
+ -	GROUND ROD



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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION  
Office of Traffic & Safety  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 188 (WILSON LANE) AT MD 191 (BRADLEY BLVD)  
GENERAL INFORMATION SHEET

DRAWN BY: SRM	F.A.P. NO. SEE TITLE SHEET	TS NO. TS-2016-G1	SHEET NO. 69 OF 82
CHECKED BY: BLB	S.H.A. NO. M03655177R	T.I.M.S. NO. E148	
SCALE: 1"=20'	COUNTY: MONTGOMERY		
DATE: DECEMBER 2002	LOG MILE: 15018802.36		